

**PATENT**Atty Docket No.: 200313170-I  
App. Ser. No.: 10/780,631**REMARKS**

Favorable reconsideration of this application is respectfully requested in view of the claim amendments and following remarks. Claims 1-44 are pending in the present application of which claims 1, 20, 25, 34, and 39 are independent.

Claims 1-44 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over the disclosure contained in Park et al. (2004/0256474) (hereafter "Park") in view of U.S. Patent No. 6,283,380 to Nakanishi et al.

This rejection is respectfully traversed.

**Examiner Interview Conducted**

Applicants' representative, Christopher Pratt, Registration No. 56,147, respectfully thanks Examiner Balta for the courtesies extended during the telephonic interview conducted on March 31, 2006. During the interview, the Examiner asserted that Park discloses "an airflow indicating device having a movable component whose movement substantially corresponds to airflow." The Examiner explained that "airflow" was being interpreted broadly as anything related to air, including temperature and humidity. Applicants' representative explained that airflow is the directional movement of air, which is distinct from a simple temperature or humidity reading. Moreover, Applicants' representative explained that the references cited in the Official Action fail to teach or suggest utilizing temperature or humidity readings to determine airflow.

The Examiner further stated that, while the robot of Park requires input to move, the input could be temperature. Applicants' representative noted that neither Nakanishi et al. nor Park suggest that the movement of the robot of Park was, or could be, influenced by

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temperature. In fact, Park discloses that the movement of the robot is controlled by input from a user, as is further discussed below. As such, neither Park nor Nakanishi et al. disclose an airflow indicating device having a movable component whose movement substantially corresponds to airflow in a vicinity of the airflow indicating device.

Finally, the Examiner stated that Park's description of the controller determining position is interpreted in the Official Action as the controller automatically determining and controlling the movement of the robot. No agreements with respect to the claims or the interpretation of Park was reached.

Claim Rejection Under 35 U.S.C. §103

The test for determining if a claim is rendered obvious by one or more references for purposes of a rejection under 35 U.S.C. § 103 is set forth in MPEP § 706.02(j):

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure.

*In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Therefore, if the above-identified criteria are not met, then the cited reference(s) fails to render obvious the claimed invention and, thus, the claimed invention is distinguishable over the cited reference(s).

The Official Action sets forth a rejection of claims 1-44 under 35 U.S.C. § 103(a) as allegedly being unpatentable over the disclosure contained in Park et al. (2004/0256474) in

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view of U.S. Patent No. 6,283,380 to Nakanishi et al. This rejection is respectfully traversed because Park and Nakanishi et al. considered singly or in combination, fail to teach or suggest the invention as set forth in independent claims 1, 20, 25, 34, 39, and the claims that depend therefrom.

At the outset, the Applicants note that at least claims 1-7, 13-19, and 25-44 appear to be rejected over Park alone, without drawing on the disclosure of Nakanishi et al. This assumption is drawn from the fact that the Official Action does not refer to Nakanishi et al. to teach or suggest any of the features of claims 1-7, 13-19, and 25-44. The Official Action appears to take the position that the only element Park fails to disclose is "the mechanical part of the movable sensor which is who the pole attach with the movable sensor," because the Official Action only relies on Nakanishi et al. as an alleged teaching of this feature. As Park discloses a sensor attached to a movable robot, it appears that the Official Action alleges that Park discloses all of the claimed features, except for a pole.

However, Park fails to teach or suggest "an airflow indicating device having a movable component whose movement substantially corresponds to airflow," as is recited by claim 1. The Official Action considers "airflow" to include temperature and humidity. However, in the claims, "airflow" refers to the direction air is moving, because it is indicated by "a movable component whose movement substantially corresponds to airflow," as recited in independent claims 1, 20, 25, 34, and 39. Therefore, "airflow" is not equivalent to a simple temperature reading. Park discloses a movable robot having a temperature, humidity, and air cleanliness sensor, but Park does not teach an airflow sensor. See paragraph 17 in Park. The Official Action cites paragraph 34 of Park as allegedly teaching airflow detection. Paragraph 34, however, makes no mention of airflow and refers only to the mobile sensor

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taking a picture to recognize its position in a room. Therefore, Park clearly fails to teach or suggest an "airflow indicating device," because Park makes no mention of attempting to detect or determine airflow based on a temperature or humidity reading.

Even assuming for the sake of argument that Park could somehow be construed as disclosing an airflow sensor, Park fails to teach or suggest a device "whose movement substantially corresponds to airflow." Park discloses a mobile sensor described in paragraph 28 as a mobile robot. Paragraphs 32-34 of Park state that the mobile sensor is controlled by the controller via input from a user, such as a voice command. Therefore, the movement of the mobile sensor of Park corresponds to a user's command and does not correspond to airflow.

Similarly, Nakanishi et al. also fails to teach or suggest "an airflow indicating device having a movable component whose movement substantially corresponds to airflow." The Applicants note that such an allegation is not made in the Official Action. Instead, the Official Action erroneously states that Park discloses this feature.

With respect to claim 8, the Official Action states that Nakanishi et al. teaches a pole. However, it is respectfully submitted that the Examiner may have misunderstood the Nakanishi et al. reference, because Nakanishi et al. discloses a "magnetic pole" and not a physical "pole" as alleged in the Official Action. See column 3, line 5. As such, the magnetic pole of Nakanishi et al. could not have a "height" and "moveable components" could not be "attached to the pole," as recited by claim 8. Moreover, Nakanishi et al.'s magnetic pole cannot reasonably be construed as having "a base configured to support the pole," as recited in claims 11 and 23.

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For at least the reasons set forth above, the proposed combination of Park and Nakanishi et al. fails to teach or suggest "a plurality of movable components configured to move in a direction of airflow...to thereby indicate the direction of airflow," as recited by claim 20.

In addition, the proposed combination of Park and Nakanishi et al. fails to teach or suggest "determining airflow directions...determining whether the airflow directions are acceptable," and "manipulating...components to bring airflow directions within acceptable ranges," as recited by claim 25, 34, and 39.

Moreover, the proposed combination of Park and Nakanishi et al. fails to teach or suggest the features of independent claims 1, 20, 25, 34, and 39. Dependent claims 2-19, 21-24, 26-33, 35-38, and 40-44 are at least allowable over the proposed combination of Park and Nakanishi et al. by virtue of their respective dependencies on independent claims 1, 20, 25, 43, and 39. The Examiner is therefore respectfully requested to withdraw the rejection of claims 1-44 and to allow these claims.

The proposed combination of Park and Nakanishi et al. fail to disclose the features of dependent claims 2-19, 21-24, 26-33, 35-38, and 40-44 for reasons in addition to their respective dependencies upon allowable independent claims 1, 20, 25, 43, and 39. For instance, the proposed combination of Park and Nakanishi et al. fails to teach or suggest a "nearly massless streamer" or "windsock," as described in claims 2 and 5, respectively. The Applicants note that the Official Action fails to state how this feature is allegedly disclosed in the cited references.

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The Official Action also fails to state how the cited references allegedly disclose "a movable mass configured to rotate about an axis in response to airflow," as recited by claim 3 and a "color changing material," recited in claim 4.

Park and Nakanishi et al. further fails to teach or suggest a sensor to detect "airflow magnitude," as recited in claim 6.

Neither Park nor Nakanishi et al. teach or suggest "a manipulator configured to grasp and position the airflow indicating device," as recited in claim 18. The Applicants note that the Official Action fails to state how this feature is allegedly disclosed cited references.

For the reasons described above, sensors could not be "attached at various heights" of Nakanishi et al.'s magnetic pole, as recited in claim 21.

With respect to claim 24, neither reference teaches or suggests a "pole attached on a robotic device configured to traverse the room." The Applicant notes that the Official Action fails to state how this feature is allegedly disclosed by the cited references.

As stated above, neither Park nor Nakanishi et al. teach or suggest a "means for determining airflow directions," as recited by claim 35.

**Conclusion**

In light of the foregoing, withdrawal of the rejections of record and allowance of this application are earnestly solicited.

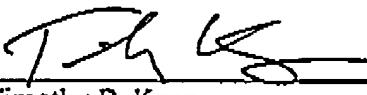
Should the Examiner believe that a telephone conference with the undersigned would assist in resolving any issues pertaining to the allowability of the above-identified application, please contact the undersigned at the telephone number listed below. Please

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grant any required extensions of time and charge any fees due in connection with this request  
to deposit account no. 08-2025.

Respectfully submitted,

Dated: May 24, 2006

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